# INTRODUCTION OF EDGE GUIDE CONTROLLER NIIKA



EGC is a major control product that aromatically aligns the edge of webs. Many companies because of follows advantages have adopted them:

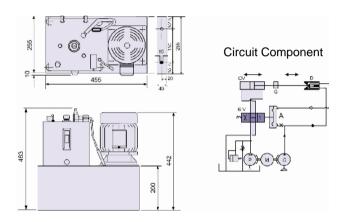
- \* All movement of material made by uneven speed, pulling stress, material thickness or mechanical damage can be adjusted to the original position by this system.
- \* Originally reserved material edge can be thus reduced to the minimum to save width of material to be added and reduce cost in material acquisition.
- \* Increased production, eliminated personnel for watching material and money spent on adjustment of material deviation can also be eliminated so as to reduce your production cost.
- \* Made your finished product edge smooth and the middle processing elevated of quality, additional value of finished product material increased with much appraisal of down stream customers.
- \* EGC guides a wide range of materials, including: Plastic Films, Laminated Films, Fabrics, Coated Fabrics, Fiber Materials, Fiberglass, Metal Foils, Papers, Paper Boards. Also, EGC fits onto most type of web machinery, including: Rotogravure presses, Flexography presses. Web offset presses, Label presses, Business Form Presses, Slitters, Sheeters, Die cutters, Bag machines, Bag filling machines, Envelope machines, Laminators, Extruders, Coating machines, Blown film lines, etc.



## HC-2A AUTO EDGE GUIDE CONTROLLER







HC-2A: Air Nozzle Sensor Automatic This type used to sensing paper, board, foil, rubber, and transparent material but not for mesh materials that edge without any coating

#### Features:

- Traditional auto EPC, economic and practical.
- Hydraulic pressure adjustable.
- Sensitive movement, high accuracy.
- Long service life.

#### Driving:

- Motor: 1/2HP \ 4P 220/380/440 3 phase 50/60HZ
- Pump capacity: 3L/min-5L/min
- Oil tank: 2A 8L,
- Hydraulic pressure: 15kg/cm<sup>2</sup>
  Oil: CPC RL68 /SHF 32
- Temperature : -10 ~+60
- oil cylinder : Select from cylinder dimension

#### Sensor:

- fluidic : Air
- $\bullet \ air \ pressure : 200mmH_2O$
- Air capacity: 60 L/min,
- Small: material max thickness: 10mm (standard)
- Large: material thickness: 11-30mm (option)

#### Function:

- cylinder press : 180kg(DIA 40MM cylinder)operating speed : 30mm/sec (Unload)
- Accuracy: 0.1mmsensitivity: 0.3sec

#### Other:

- weight: 2A 40kg, (without cylinder)
- Installation : horizontal

# HC-ZAM AUTO / MANUAL EDGE GUIDE CONTROLLER NIIKA



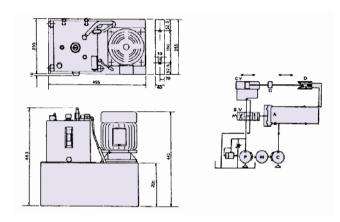
The specification HC-2AM as HC-2A but with manual control switch to align stand position after material run off and set up.



## HC-HEI AUTO PHOTO ELECTRIC EDGE CONTROLLER







HC-HE: Optical Sensor Automatic
This type is ideally suited to sensing

This type is ideally suited to sensing paper, board, foil rubber or any other opaque material.

#### Features:

- Can detect without being affected by outside lights.
- Can detect without being affected by dust and wadding.
- Can sense and detect any color.
- Low trouble, easy to maintain, long life.

### **Driving:**

motor: 1/2HP \ 4P 220/380/440 3 phase 50/60HZ

• pump capacity: 3L/min-5L/min

• oil tank: 15L

Hydraulic pressure: 15kg/cm²
oil: CPC RL68/ SHF 32

• temperature : -10°C~+60°C

• oil cylinder: Select from cylinder dimension.

#### Sensor:

• Optical : HE1

• controller voltage: AC220V

Small: material max thickness: 15mm (standard) Large: material thickness: 16-30mm (option)

#### **Function:**

• cylinder press : 180kg (40Φ)

• operating speed : 30mm/sec (Unload)

• precision: 0.2mm

#### Other:

• weight :

• Installation: horizontal

## HC-HE AUTO / MANUAL PHOTO ELECTRIC EDGE CONTROLLER



The specification HC-HE as HC-HE 1 but with manual control switch to align stand position after material run off and set up.

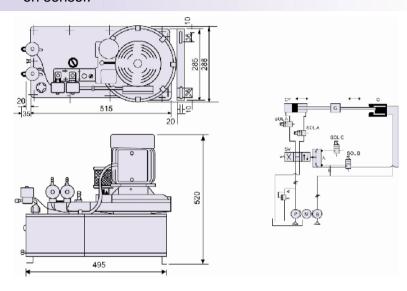


# HG-5AM EDGE GUIDE CONTROLLER AUTO / MANUAL NIIKA



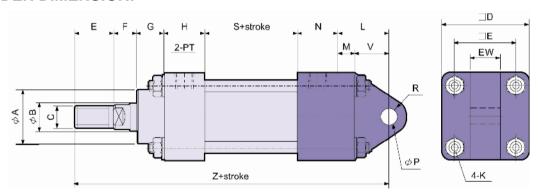
The specification base the same as HC-2A but several features as below:

- 1. Temperature does not rise easily
- 2. The air not easy block because of direct air connection, which bring strong air to blow away of dust and wadding on sensor.

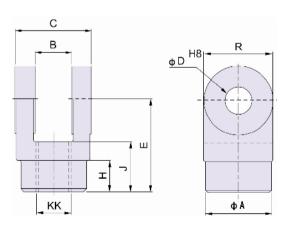




## **CYLINDER DIMENSIOR:**



| SIZE<br>BORE | Α  | В  | С        | D  | DE | Е  | F  | G  | Н  | Ν  | L  | М  | ٧  | Р  | R  | EW | K         | S  | Z   | РТ  |
|--------------|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------|----|-----|-----|
| 40           | 40 | 20 | M16XP1.5 | 64 | 45 | 28 | 17 | 20 | 30 | 30 | 36 | 11 | 25 | 12 | 13 | 22 | M8XP1.25  | 50 | 211 | 3/8 |
| 50           | 45 | 20 | M16XP1.5 | 70 | 50 | 28 | 17 | 20 | 30 | 28 | 36 | 12 | 24 | 12 | 13 | 22 | M10XP1.25 | 50 | 209 | 3/8 |



| KK       | Α  | В  | O  | D  | ш  | っ  | Ι  | R  |
|----------|----|----|----|----|----|----|----|----|
| M14XP1.5 | 26 | 16 | 44 | 12 | 56 | 20 | 21 | 14 |
| M16XP1.5 | 26 | 16 | 44 | 12 | 56 | 20 | 21 | 14 |



## Installation

The improper mounting of the detector and improper arrangement of the rolls will result in unsatisfactory control performance, or will cause wrinkles to the web. When planning and aligning the process line, the following described items must keep in mind.

## A. Unwinding (pay off reel system)

**B.** If the material wound is irregular, this system guide the edge position and let it regularly into the subsequent process.

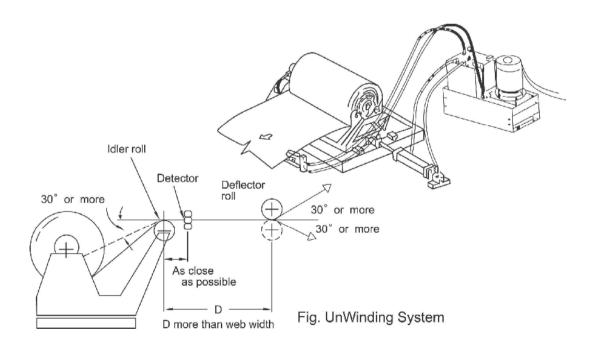
The idler roll moves with the unwinding reel stand.

Mount the detector fixed and as close to the idler roll as possible.

The leaving web formed a angle at the deflector roll should more than 30°

The important, do not allow the web slip on this roll.

The distance between two rolls should be more than the maximum width of the web.

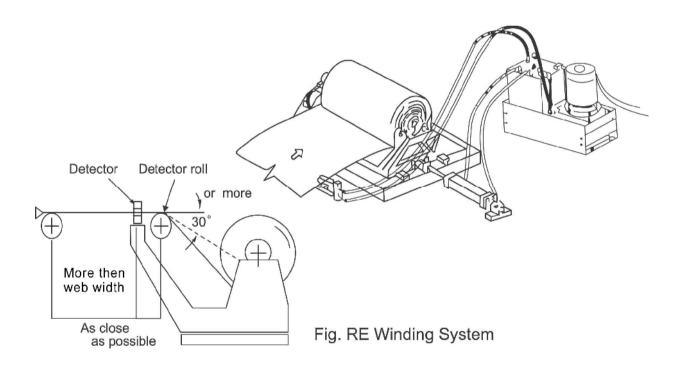




## B. Rewinding (wind-up reel system)

This reel system to uniform the web of winding up coil with edge alignment. Mount the deflector roll rigidly and independent from the reel stand. Mount the The detector on the reel stand-extending arm, so moves together with the wound coil.

The detector located on the entry side of the detector roll as close as possible. The angle formed by the incoming web on the detector roll is no less then 30° Larger diameter and higher friction are preferable to avoid slippage over this roll. The distanced between the wind-up reel and the detector roll should be more than the maximum with of the web. If distance is too short, winkles will happened on thins or soft web.





## **EPC/LPC99A Controller**

#### **ADVANTAGE:**

Reliable versatile controller for use with Niika photoelectric or ultrasonic sensors. Capable of line or edge sensing over a wide range of materials. Very easy to set up and calibrate with auto centre function and remote mounting capability. 3 functions for Auto/Manual/Centering.

| Model       | EPC/LPC99A Controls           |  |  |  |  |  |
|-------------|-------------------------------|--|--|--|--|--|
| Power       | AC100V-240V 50/60HZ           |  |  |  |  |  |
| Methods     | PWM                           |  |  |  |  |  |
| Temperature | 0℃~50℃                        |  |  |  |  |  |
| Weight      | 3kg                           |  |  |  |  |  |
| Material    | ABS                           |  |  |  |  |  |
| Size        | (D)182m/mx(W)246m/mx(H)156m/m |  |  |  |  |  |



## **Linear Actuators**

Electromechanical actuators with built in end of stroke and centre stroke sensors. Electrical DC Servo actuator with powerful thrust and fast response. Durable electrical construction without hydraulic piping, can be cleaned easily.



| TYPE     | THRUSTER | STROKE | MAX<br>STAND WEIGHT | MAX<br>ACTUATOR SPEED | MAX<br>LINE<br>SPEED | Weight |
|----------|----------|--------|---------------------|-----------------------|----------------------|--------|
| KC80-20  | 100kg    | 80m/m  | 600 KGS             | 20mm/s                | 300<br>MTRS/M        | 5.5kg  |
| KC150-20 | 150kg    | 150m/m | 1500 KGS            | 20mm/s                | 300<br>MTRS/M        | 12.5kg |



## **ES99N OPTICAL SENSOR**

ES99N is special design for edge position sensor. Use white LED instead of tradition light ball. Maintenance free.

| Model       | ES99N                                |
|-------------|--------------------------------------|
| Power       | ±12VDC                               |
| Light       | WHITE LED                            |
| Application | PAPER, FABRIC, MESH EDGE<br>POSITION |
| Temperature | 0°℃~50°℃                             |
| Weight      | 0.4kg                                |
| Material    | ZINC/ ALUMINUM ALLOY                 |
| Dimension   | (L)98m/mx(W)80m/mx(H)30m/m           |



## **LS99N OPTICAL SENSOR**

LS99N is special design for line position sensor. Use white LED instead of tradition light ball. Maintenance free.

| Model                       | LS99N                                       |  |  |  |  |
|-----------------------------|---|--|--|--|--|
| Power                       | ±12VDC                                      |  |  |  |  |
| Light                       | WHITE LED                                   |  |  |  |  |
| Application                 | PRINT LINE, PAPER PLASTIC FILM LINE POSTION |  |  |  |  |
| Sensor distance to material | 25~30 mm                                    |  |  |  |  |
| Temperature                 | 0°℃~50°℃                                    |  |  |  |  |
| Weight                      | 0.3kg                                       |  |  |  |  |
| Material                    | ZINC/ ALUMINUM ALLOY                        |  |  |  |  |
| Dimension                   | (L)96m/mx(W)53m/mx(H)30m/m                  |  |  |  |  |



## **US99N ULTRASONIC SENSOR**

The sensor of US99N is design by ultrasonic and Special use on paper, transparent file and aluminum foil. With this sensor that one machine can handle most of Materials expect the fabric and mesh.

| Model       | US99N                              |
|-------------|------------------------------------|
| Power       | ±12VDC                             |
| Application | Paper, aluminum foil, plastic film |
| Sensor      | Ultrasonic                         |
| Temperature | 0°℃~50°℃                           |
| Weight      | 0.4kg                              |
| Material    | ALUMINUM ALLOY                     |
| Size        | (L)130m/mx(W)92m/mx(H)32m/m        |

